



Focus Sheet / PCBs in Caulk

Guidance for occupants and facilities staff

PCBs

Polychlorinated Biphenyls (PCBs) are a class of persistent manmade chemicals invented in the 1950s and used widely as electrical insulating fluid and plasticizers. Due to their toxicity and carcinogenicity, the sale and use of PCBs were banned in 1978. In addition, materials containing over 50 parts per million (ppm) PCBs are banned from use and must be removed and disposed of properly.

PCBs were added to some caulking compounds while the use of PCBs was legal. Therefore, buildings constructed or renovated between 1950 and the 1980s may have PCBs in the caulk around windows and in masonry expansion joints. The caulk and expansion joint material in some schools and other public buildings around the nation have tested positive for PCBs.

Regulatory guidance

The Environmental Protection Agency (EPA) is currently developing new rules that address the issue of PCBs in caulk. Because of the potentially huge expense of removing PCB containing caulk from buildings and the lack of understanding about the risks of exposure to PCBs in caulk, the EPA released guidance including interim procedures for managing PCB containing caulk in place until funds can be procured for removal and replacement. Until the new rules are final, EH&S is using the EPA guidance to prioritize action and communicate risks to building occupants and maintenance staff.

The EPA has placed an emphasis on managing caulk that has begun to degrade or crack and therefore may release PCBs into the air and soil, or can be transferred to people when they have their hands near windows. The EPA has encouraged public agencies to survey buildings built or remodeled between 1950 and the 1980s to assess the condition of building caulk. They prioritize areas with high public access and use by children, who are more vulnerable to PCBs.

EH&S has prioritized and is currently surveying UW buildings that may contain PCB-contaminated caulk. Caulk that is cracked or degraded and that could present an exposure risk to occupants and maintenance staff are being tested for PCBs. See the pictures at right for examples of intact and degraded caulk.

EH&S is working with building managers and maintenance staff to report results and work on interim measures. EH&S maintains a database of sample results which are available to anyone upon request.



Examples of intact caulk in good shape.

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Interim measures for occupants near PCB-containing caulk

EH&S is surveying all buildings and will notify occupants if they need to follow interim measures while plans to mitigate or remove the caulk are put in place. To minimize potential exposures to PCBs during that time, the EPA recommends the following steps:

- Avoid contact with the window caulk or masonry joint.
- When dusting, use a wet or damp cloth or mop to clean surfaces.
- Do not sweep with dry brooms and minimize the use of dusters.
- Avoid damaging the window caulk further.

Maintenance and renovation projects

If UW staff people are doing maintenance or renovation work around or to windows or masonry joints in buildings built or renovated between the 1950s and 1980s, they need to be careful to avoid potential exposure to PCBs.

First, contact EH&S to see if PCB sample data is available for the area in which the staff will be working. If not, request sampling of the caulk or assume that the caulk contains PCBs.

If the caulk contains asbestos or lead, follow the procedures developed for handling those materials even if the caulk contains PCBs. If the caulk does not contain asbestos or lead but does contain PCBs or is assumed to contain PCBs, follow the EPA recommendations for working with PCB contaminated caulk listed below:

Protect passersby by containing the work area with plastic or other protection or keep passersby out of the work area.

Cover the floor or ground with heavy plastic sheeting.

Wear standard gear similar to working on materials containing less than 1% asbestos

Choose methods that minimize the amount of dust generated.

Place waste caulk along with contaminated PPE, plastic sheeting, and other disposable equipment in an appropriate container for disposal as hazardous waste.

Use a HEPA vacuum or wet or damp cloth to clean tools and any surfaces not covered by sheeting. Dispose of HEPA filter /cloth as hazardous waste.

Ensure that there is no visible debris or residue when the job is complete.

For more information, see the EPA guidance for handling PCBs in caulk during renovation at <http://www.epa.gov/pcbsincaulk/pdf/caulkcontractors.pdf>. See also the EH&S Design Guide for PCBs, written for both UW facilities staff and Capital Projects Office project and construction managers, at <http://www.ehs.washington.edu/fsodesignrev/index.shtm>.

Disposal

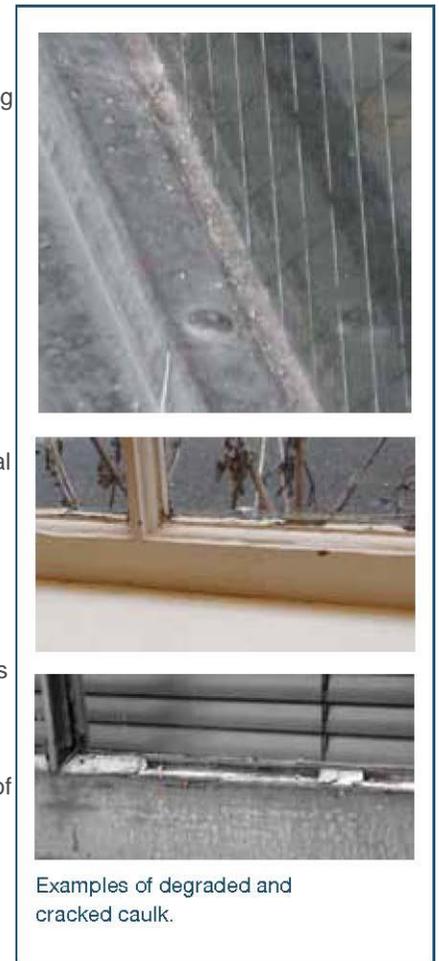
Building materials with PCB concentrations greater than 2 ppm have disposal restrictions. Building materials with greater than 50 ppm must be disposed of as hazardous waste. Contact the EH&S Environmental Programs Office for advice on disposal and containers for larger projects.

For copies of this and other EH&S focus sheets, visit www.ehs.washington.edu or call 206.543.7262.

Environmental Health and Safety

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Examples of degraded and cracked caulk.

For more information about the building survey, results and disposal, contact the EH&S Environmental Programs Office at 206.616.5835 or chmwaste@uw.edu. For questions about personal protection and interim measures, contact the EH&S Occupational Health and Safety Office at 206.543.7388.

